

WHAT IS CLAIMED IS:

1 1. A method of simultaneously polishing a plurality of fiber optic cable connectors in a
2 polishing apparatus having a base with a plurality of wedge-shaped areas each of which is aligned
3 with a corresponding fiber optic cable connector, comprising:

4 securing the plurality of fiber optic cable connectors in a fixture;

5 imparting a relative motion between the fixture holding the plurality of fiber optic
6 cable connectors and the base of the polishing apparatus; and

7 controlling the relative motion so that each of the plurality of fiber optic cable
8 connectors remains in a respective one of the wedge-shaped areas.

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1 2. A method for simultaneously polishing a plurality of fiber optic cable connectors as
2 recited in claim 1, said controlling relative motion controlling the relative motion to impart the
3 relative motion in a predetermined pattern.

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1 3. A method of simultaneously polishing a plurality of fiber optic cable connectors as
2 recited in claim 2, said controlling relative motion controlling the relative motion such that the
3 predetermined pattern is a rotating locus of motion rotating within each of the wedge-shaped areas.

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1 4. A method of simultaneously polishing a plurality of fiber optic cable connectors as
2 recited in claim 1, wherein the plurality of fiber optic cable connectors include at least two different
3 types of fiber optic cable connectors.

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1 5. A method of simultaneously polishing a plurality of fiber optic cable connectors as

recited in claim 1, further comprising:

providing polishing pads in the wedge-shaped areas;

applying a polishing medium to the polishing pads; and

polishing each fiber optical cable connector with the polishing medium and a corresponding one of the polishing pads.

6. A method of simultaneously polishing a plurality of fiber optic cable connectors as recited in claim 5, further comprising:

stopping the method if polishing is completed of the predetermined pattern is completed.

7. A method of simultaneously polishing a plurality of fiber optic cable connectors as recited in claim 2, wherein the predetermined pattern is a figure eight.

8. A method of simultaneously polishing a plurality of fiber optic cable connectors as recited in claim 2, wherein the predetermined pattern is elliptical.

9. A method of simultaneously polishing a plurality of fiber optic cable connectors as recited in claim 2, wherein said controlling relative motion substantially prevents connector trace overlap.

10. A method of simultaneously polishing a plurality of fiber optic cable connectors in a polishing apparatus having a base with a plurality of wedge-shaped areas each of which is aligned

3 with a corresponding fiber optic cable connector, comprising:

4 securing the plurality of fiber optic cable connectors in a fixture;

5 applying alternating polishing media of different abrasivity to the wedge-shaped
6 areas;

7 imparting a relative motion between the fixture holding the plurality of fiber optic
8 cable connectors and the wedge-shaped areas; and

9 controlling the relative motion so that each of the plurality of fiber optic cable
10 connectors remains in a respective one of the wedge-shaped areas.
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12 11. A method of simultaneously polishing a plurality of fiber optic cable connectors
13 according to claim 10, wherein said applying alternating polishing media applies a first and a second
14 polishing media having different abrasivities to respective wedge-shaped areas.

15 12. A method of simultaneously polishing a plurality of fiber optic cable connectors
16 according to claim 11, further comprising:

17 rotating the base relative to the fixture so that the plurality of fiber optic cable
18 connectors are aligned with different wedge-shaped areas having polishing media with different
19 abrasivities; and

20 repeating said imparting relative motion and said controlling the relative motion.
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22 13. A method of simultaneously polishing a plurality of fiber optic cable connectors
23 according to claim 10, wherein said applying alternating polishing media applies a first, a second,
24 and a third polishing media having different abrasivities to respective wedge-shape areas.

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1 14. A method of simultaneously polishing a plurality of fiber optic cable connectors
2 according to claim 13, further comprising:

3 rotating the base relative to the fixture so that the plurality of fiber optic cable
4 connectors are aligned with different wedge-shaped areas having polishing media with different
5 abrasivities;

6 repeating said imparting relative motion and said controlling the relative motion;

7 rotating the base relative to the fixture so that the plurality of fiber optic cable
8 connectors are aligned with different wedge-shaped areas having polishing media with different
9 abrasivities; and

10 repeating said imparting relative motion and said controlling the relative motion.
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1 15. A method of simultaneously polishing a plurality of fiber optic cable connectors
2 according to claim 10, wherein said applying alternating polishing media applies N polishing media
3 having different abrasivities to respective wedge-shape areas.
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1 16. A method of simultaneously polishing a plurality of fiber optic cable connectors
2 according to claim 15, further comprising:

3 rotating the base relative to the fixture so that the plurality of fiber optic cable
4 connectors are aligned with different wedge-shaped areas having polishing media with different
5 abrasivities; and

6 repeating said imparting relative motion, said controlling the relative motion and said
7 rotating the base (N-1) times.

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1 17. A method of simultaneously polishing a plurality of fiber optic cable connectors
2 according to claim 10, wherein the polishing media includes a polishing film and/or a polishing
3 slurry.

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1 18. A method of simultaneously polishing a plurality of fiber optic cable connectors
2 according to claim 10, further comprising:

3 providing polishing pads in the wedge-shaped areas, wherein said applying
4 alternating polishing media applies the alternating polishing media to the polishing pads.

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1 19. A method for polishing fiber optic cable connectors as recited in claim 10, wherein
2 the plurality of fiber optic cable connectors include at least two different types of fiber optic cable
3 connectors.

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1 20. A method for polishing fiber optic cable connectors as recited in claim 10, wherein
2 said controlling relative motion substantially prevents connector trace overlap.

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1 21. A method for simultaneously polishing a plurality of fiber optic cable connectors as
2 recited in claim 10, said controlling relative motion controlling the relative motion to impart the
3 relative motion in a predetermined pattern.

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1 22. A method for polishing fiber optic cable connectors as recited in claim 21, said
2 controlling relative motion controlling the relative motion such that the predetermined pattern is a

3 rotating locus of motion rotating within each of the wedge-shapes areas.

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1 23. A method for polishing fiber optic cable connectors as recited in claim 21, wherein
2 the predetermined pattern is a figure eight.

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1 24. A method for polishing fiber optic cable connectors as recited in claim 21, wherein
2 the predetermined pattern is elliptical.

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